Title (en)

Method for pulse activation of a piezo-electric sound transmitter-transducer.

Title (de)

Verfahren zur Impulsanregung eines piezoelektrischen Schall-Sendewandlers.

Title (fr)

Procédé pour l'excitation par impulsion d'un émetteur-transducteur piézo-électrique.

Publication

EP 0036186 A2 19810923 (DE)

Application

EP 81101838 A 19810312

Priority

DE 3009975 A 19800314

Abstract (en)

[origin: US4376255A] A piezoelectric ultrasonic transducer is triggered by a predeflection of the transducer in a first direction with a square-wave pulse or a saw-tooth pulse which has a rapidly dropping trailing edge to effect deflection in the opposite direction, with an overshoot. At the maximum point of overshoot, an alternating triggering voltage, preferably in the form of a pulse sequence, is applied to energize and maintain the transducer in resonance oscillation.

Abstract (de)

Anwendung einer Voranregungsspannung (1), um den Sendewandler schon mit der ersten Periode (13) der eigentlichen Wechselspannungs-Anregung sofort auf wenigstens nahezu die volle Sende-Schwingungsamplitude (17) zu bringen, womit ein definierter Sende-Impulsanfang gegeben ist.

IPC 1-7

H04R 3/00; H04R 17/00; G01S 7/52; G01S 15/10; B06B 1/06

IPC 8 full level

B06B 1/02 (2006.01); **B06B 1/06** (2006.01); **G01B 17/00** (2006.01); **G01S 7/52** (2006.01); **G01S 7/524** (2006.01); **G01S 15/10** (2006.01); **H04R 3/00** (2006.01); **H04R 17/00** (2006.01)

CPC (source: EP US)

B06B 1/0215 (2013.01 - EP US); **G01S 7/524** (2013.01 - EP US)

Cited by

EP0123277A3; EP0180652A1; US4654833A; FR2757009A1; EP0852968A1

Designated contracting state (EPC)

AT BE CH DE FR GB IT NL SE

DOCDB simple family (publication)

EP 0036186 A2 19810923; **EP 0036186 A3 19820929**; **EP 0036186 B1 19840111**; AT E5838 T1 19840115; BR 8101519 A 19810915; DE 3009975 A1 19810924; DE 3009975 C2 19830127; DE 3161859 D1 19840216; JP S56145310 A 19811112; PT 72647 A 19810401; PT 72647 B 19820319; US 4376255 A 19830308

DOCDB simple family (application)

EP 81101838 A 19810312; AT 81101838 T 19810312; BR 8101519 A 19810313; DE 3009975 A 19800314; DE 3161859 T 19810312; JP 3639481 A 19810313; PT 7264781 A 19810311; US 23565381 A 19810218